

pression between the fingers and percussion with the hammer more or less pain was provoked in all cases, although any marked idiomuscular contractility was lacking, and this pain v. Bechterew interprets as a sign of altered muscular nutrition. In final proof of his views he points to the family tendency to myotonia, which is frequently observed, and says that the time of outbreak of the disease (*i. e.*, whether it shall be congenital or acquired) depends simply upon the time at which the factors which lead to metabolic disturbances reach their development.

J. W. COURTNEY.

- 133 FALL VON ASTHENISCHER BULBÄRPARALYSE IN FOLGE VON AUTOINTOXICATION (A Case of Asthenic Bulbarparalysis Caused by Auto-intoxication). J. A. Feinberg (Neurol. Centralbl., Feb. 1, 1900. No. 3, p. 103).

The case here reported is most interesting. The patient was an intelligent man of 44, the father of six healthy children, and without hereditary or family neuropathological predisposition. Through sedentary habits and mental anxiety, he had acquired an atony of the lower bowel, which manifested itself in obstinate constipation. In the early part of November, 1898, the coprostasis became very marked, and in addition the patient experienced dyspepsia and nausea. Cathartics brought only temporary relief. In a few days there was a return of the obstipation, and purgatives were of no avail. The patient suffered from colic, meteorism, and vomiting. After five days of this deplorable situation there appeared threatening nervous phenomena—severe pain in the occiput and in the upper dorsal vertebræ, faintness, general weakness, paresthesia in all four extremities, bilateral ptosis, inability to wrinkle the forehead, paresis of the muscles of the eyebulbs, embarrassed lip and tongue movement, dysarthria, incessant drooling, difficult mastication, and dysphagia. No fever.

In great anxiety the patient, who lived at some distance, undertook the journey to Feinberg's clinic, but in the meantime he began to have profuse evacuations of the bowels, and following these the nervous symptoms diminished so rapidly in intensity that F. saw him only in the recovering stage—about a month after the development of the dyspeptic phenomena. Feinberg found: Slight bilateral ptosis, impaired mobility of the eyebulbs, wrinkling of brow impossible on right, slight left, paresis of the right facial. Speech and deglutition were considerably improved, the reflexes normal, and pulse and respiration showed no marked alteration. The cranial and spinal pain had disappeared and no abnormalities were discoverable in the internal organs, including the kidneys.

The patient complained of great weakness and prostration, even in bed, although there was no discoverable diminution in the size of his muscles and no trophic disturbance, and nothing suggesting gross lesion of peripheral nerves, cord, or brain.

By the middle of December the ptosis had disappeared and the lip movements were normal. The patient could wrinkle his brow fully, but the lower facial on the right was still parietic, and there was still a complaint of great general weakness. This weakness persisted for nearly a month after the subsidence of all local symptoms.

In considering the pathological substratum of the above condition the author excludes polioencephalitis superior, from the absence of its etiological factors and such stormy characteristics as disturbance of consciousness, delirium, hallucinations, and dyspnea. Alcoholic poison and other exogenous toxic agents he is also able to rule out. Hemorrhage into the bulb he does not believe probable from the age

of the patient, the integrity of his circulatory organs, the absence of nephritis, and the rapidly favorable course of the disease. His decision in the case is: Asthenic bulbarparalysis, without organic lesion.

J. W. COURTNEY.

- 134 "ZUR CASUISTIK DER RÜCKENMARKSVERLETZUNG DURCH WIRBEL-FRACTUR NEBST BESCHREIBUNG EINES GEHVERBANDES FÜR PATIENTEN MIT LÄHMUNG BEIDER UNTERER EXTREMITÄTEN" (Spinal Cord Injuries from Fracture of the Vertebrae, with Description of an Apparatus for Paraplegic Patients). Lenznick. Münchener med. Woch., 1900, No. 12, S. 386).

A man of twenty-six years fell from a scaffolding 14 meters high, striking on his back on a beam 3 m. above the ground, and then coming down upon his knees. He did not lose consciousness, but became at once paraplegic, with loss of control of his bowels and bladder. When he came under the author's care, a month later, the paraplegia persisted, there was complete anesthesia of the lower extremities, and there were bed-sores over the sacrum, the left malleolus, left leg and right heel.

There was deformity in the lower dorsal and upper lumbar regions, the twelfth dorsal spine being very prominent. Laminectomy of the eleventh and twelfth arches was performed by Prof. v. Eiselberg, a fracture of the left lamina of the twelfth arch being found, the dura and cord being compressed at this point and adhesions having been set up. The body of the twelfth vertebra was found prominent, but could not be reached on account of thickening of the dura, severe hemorrhage following at attempt to separate it.

The dura, being split up for some distance, was found to be adherent to the arachnoid on both sides, most firmly on the left. The cord showed a transverse scar. The dura was stitched and the wound closed. Healing took place promptly. The patient recovered some control over the bladder and rectum, but the paraplegia remained the same. In order to enable him to get about the author devised an apparatus consisting of two flat iron bars, each about 5 cm. wide, and long enough to extend from the shoulder to the heel. These were bent to fit the patient's figure, diverging somewhat above and below, one passing down behind each leg and being fastened together by three cross pieces at the upper part. These cross pieces were bent so as to partially encircle the trunk, and the leg portions were provided with four similarly curved supports, passing half way around the leg. To the lower ends of the bars were attached foot-plates, and to the upper straps for fastening the apparatus over the shoulders. This apparatus, thoroughly padded, was applied to the patient's back while he lay stretched upon his belly, and bound on with flannel bandages. The patient was then raised to an upright position, and eventually learned, with the aid of a Volkmann's bench, to get about over the smooth floor with a fair degree of ease. A picture of the original apparatus is appended. The author has since improved it by making the leg portions and the cross pieces for the trunk extensible, by a telescoping arrangement, and also has provided for the application of a head swing at the upper end.

ALLEN.

PATHOLOGY.

- 135 ZUR FRAGE DER "RETROGRADEN DEGENERATION" (On the Question of Retrograde Degeneration). E. Raimann (Jahrbücher für Psychiatrie und Neurologie, Vol. XIX, No. 1, p. 36).

Retrograde degeneration is a term used to describe the degeneration which takes place in a divided nerve centrally as opposed to the